

# White Bank Dry Rocks Reef Temporarily Closed to All Activities Florida Keys National Marine Sanctuary



### What does this temporary closure mean for divers and snorkelers?

White Bank Dry Rocks patch reefs are temporarily closed to all activities (except permitted research) due to a fast spreading die-off of staghorn coral. This emergency 60-day closure includes the two patch reefs known as White Bank North and White Bank South. No person or vessels will be allowed to enter the closed area during the closed period. Mooring buoys have been removed and replaced with "no-entry" spar buoys. Other nearby reefs remain open to snorkelers and divers. Sanctuary staff will work with dive charters to place mooring buoys on these reefs to minimize the impact of the closure to dive operations.

## Why has a closure of this area been authorized?

The closure of this area was authorized as a temporary measure by the Sanctuary Superintendent based on observations by scientists of a rapidly-spreading die-off of staghorn coral. Scientists are concerned that a new coral disease may be causing the decline. Experts on coral disease recommended that these reefs be temporarily closed in order to prevent the potential spread of the die-off by divers or snorkelers and to eliminate a potential source of stress on the affected coral. Closure will also allow scientists to conduct detailed field experiments to learn more about the way the die-off is transmitted from one coral to another. Data are being collected on the environmental conditions at the site.

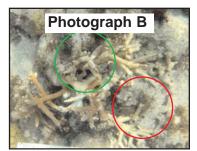
#### What kind of tests will be run on the tissue samples collected from the affected coral?

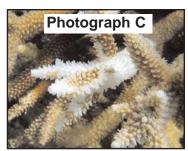
NOAA scientists have obtained small samples of tissue from affected corals to be analyzed in the laboratory in order to determine the cause of the decline. The samples will undergo a series of recently developed tests or "bioassays" that diagnose when corals are stressed and therefore susceptible to disease. These tests detect changes at the cellular level of the coral by measuring the presence or absence of certain "indicator" substances, including those that are produced when the cell function begins to break down. The test results will be used along with environmental data to help determine the most likely cause of the decline observed in staghorn corals in the White Banks area. It is likely that test results will not be known until sometime in July.

## How can divers and snorkelers help?

The most important thing is to avoid contacting the coral with your hands or equipment. This rule applies to all coral. Since the way the disease is spread is not known, touching the affected coral could spread the outbreak to other corals. It could also introduce further stress on an already stressed organism. If you do see other staghorn coral colonies with large white patches or stark white, dead staghorn, contact: **Mote Marine Lab's Marine Ecosystem Event Response and Assessment Program (MEERA) at (305) 745-2729** with information about the exact location of your sighting.







Photographs A and B, taken a few weeks apart, show the rapid die-off of a staghorn coral colony at White Bank Dry Rocks. Note the living coral with its light yellow-brown color in Photograph A as compared with the dead (white or algae-coated) tissue in Photograph B. Photograph C shows a close-up of the "sloughing" off of coral tissue that is associated with this outbreak. (Photo credit: Dana Williams, Ph.D., NOAA Fisheries)